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Postnatal Depression: A Review of the Literature

Non-psychotic Postnatal Depression (PND) is the most common complication of childbirth. Commonly misconstrued as the “baby blues”, PND is, in fact, just as serious as Major Depressive Disorder (MDD). PND affects 13%-15% of all mothers; if untreated, it can lead to Postnatal Psychosis, a much more severe illness that has led to suicide and child abuse. Despite the similarities between Major Depressive Disorder and PND, the disorders are different in many aspects. Symptoms of PND are directly related to the new child and to the demands of motherhood. Unlike PND, MDD is classified specifically in the Diagnostic and Statistical Manual of Mental Disorders (APA, 2000). The lack of proper classification of PND may be responsible for the lack of proper education on the topic. Risk factors include socio-demographic, socio-economic, psychiatric, biological and personal factors. Perceived social support, the level of satisfaction with familial relationships and beliefs about motherhood are all also likely to correlate with the severity of symptoms. The Edinburgh Postnatal Depression Scale, the Beck Depression Scale and the Postnatal Depressive Symptom Survey are all used the most in screening for depressive symptoms specific to the birth of a child. However sensitive, the tests used have limitations due to their original design not being specified for the post partum period. Treatment is currently being modified for PND clients. There are different factors associated with Postnatal Depression that are not found among the more commonly known form of depression and treatment must focus on those specific factors. Treatment has been found to be successful in most cases and it is imperative to further research in order to develop more successful treatment. In an attempt to increase the awareness of Postnatal Depression, the literature review emphasizes on risk factors associated with PND as well as the screening tools and treatment options.

Non-psychotic Postnatal Depression (PND) is the most common complication of childbirth. Over the last decade or so, there have been rising concerns for Postnatal Depression. In 2005 the Pennsylvania House of Representatives passed a bill mandating doctors and midwives to educate their patients about Postnatal Depression (Blum, L.D., 2007). Although PND is commonly misconstrued as the “baby blues”, it is, in fact, as serious as Major Depressive Disorder (MDD; Abrams & Curran, 2007). The distinguishing characteristics between PND and the “baby blues” are the timing of onset

and the duration of the emotional upsets. Baby blues occurs within the immediate week after child birth with symptoms of tearfulness, irritability and sadness, and is usually present and gone within two weeks. Thus, the “baby blues” is often compared to premenstrual syndrome. However, if the psychological state does not improve, the “baby blues” may lead to Postnatal Depression which can last for up to two years after the birth of the child (Blum, L.D., 2007). Occurring between two weeks to two years postpartum, PND affects 13%-15% of all mothers. If untreated, PND can lead to Postnatal

Psychosis, which can affect one percent of delivering women (Abrams & Curran, 2007). Postnatal Psychosis is distinguishable from PND in that mother's who develop postnatal psychosis show characteristic signs of delusions and hallucinations in addition to the depression symptoms (Blum, L.D., 2007). Nevertheless, PND is widely under-diagnosed, as only a small fraction of the 50%-80% of mothers whom show symptoms of depression within the first year of childbirth are diagnosed with PND symptoms (Reid & Oliver, 2007).

Symptoms of PND

Symptoms of Postnatal Depression are very similar to Major Depression Disorder in that they are both characterized by emotional sadness, headaches and body aches, fatigue and irritability (Abrams & Curran, 2007). Unlike PND, MDD is classified as having depressed or sad mood or anhedonia (a lack of interest) for two or more weeks, along with the presences of five or more of the following symptoms within the past two or more weeks: change in sleep patterns, weight gain or loss, fatigue or low energy, psychomotor retardation or psychomotor agitation, suicidal thoughts, worthlessness or inappropriate guilt, indecisiveness or inability to concentrate (DSM-IV-TR, APA, 2000). Despite the fact that the disorders are quite similar, they are different in many aspects. For example, PND is associated with paranoia, such as brooding over the child's well being, and physical symptoms, such as breast infection due to the breakdown of the immune system (Abrams & Curran, 2007). Further, many of the symptoms characterized in MDD, are perceived to be somewhat "typical" in the new mother. For example, after delivery, it is fairly common that the woman will have a change in weight (loss), and a change in sleep patterns that may appear to resemble insomnia or hypersomnia due to the sleep patterns of the young infant. Further, it is common for a new mother to feel indecisive or have an inability to concentrate when they feel deprived of restorative sleep. Therefore, because many of the symptoms of PND are construed to be typical in a new parent, the persistence of the symptoms may be disregarded as typical for early motherhood. Therefore, the lack of proper classification of the

disorder leads to lack of appropriate education on the topic, thus, leading to underreporting.

Though underreporting and lack of education lead to the absence of significant information, it may also lead to misdiagnosis and mistreatment of the disorder. When untreated, one in four women will continue to have symptoms of depression one year after child birth and one in 21 women will continue to have depressive symptoms two years after child birth (Pallamara, K., et. al., 2008). PND may negatively alter the quality of relationship of the mother and child, and mother and her significant other, consequently adding more stress for the women to bear, thus increasing the severity of the condition (Foreman, D., et. al, 2000). Studies show that insufficient bonding between the mother and infant leads to poor cognitive and social development for the child as well as increased risk of child abuse and neglect (Abrams & Curran, 2007; Rubertsson, C., Wickberg, B., Gustavsson, P. & Radestad, I., 2005). According to K. Palamar et. al., (2008), women with untreated postpartum depressive symptoms are 300 times more likely to experience the depressive symptoms during subsequent pregnancies. Also the likelihood of suicide is intensified during the second pregnancy which may account for the highest risk of death for this population (Pallamara, K., et. al., 2008). Further, underdiagnosis and mistreatment of the disorder may lead to higher cases of postnatal psychosis (PNP), a much more serious and dangerous form of PND (Abrams & Curran, 2007).

Screening for Postnatal Depression

According to W.G. De La Haye (2006), over 50% of cases go unreported because of the ineffectiveness of standard verbal examinations during postpartum follow-ups with a primary care physician. Evidence points to the success of standardized testing in the early detection of postnatal depression (Lee et al., 2003). Though there are certain validity issues with self reported surveys, there are three widely used screening tools to identify symptoms of depression during the postpartum period. The Edinburgh Postnatal Depression Scale, the Beck Depression Scale and the Postnatal Depressive Symptom Survey all range in a reliability (0.73-0.87, 0.73-0.92 and 0.98,

respectively), but tend to reliably assess PND depending on the time of assessment (Baker & Oswalt, 2007). Because there are not many tests specifically designed to measure postnatal depressive symptoms, the surveys mentioned are considered highly reliable. Because of the reliability of the surveys, it is believed that the screening tools can be administered at the most vulnerable time period post partum and can aid in lower rates of PND (Lee et al., 2003)

Edinburgh Postnatal Depression Scale

The Edinburgh Postnatal Depression Scale is one of the few scales found to be most sensitive during the postnatal period. It is a 10-item paper and pencil self report measurement which attempts to measure the associated symptoms of PND (Armstrong, S., & Small, R., 2007). This particular survey has a cut off of 12/13 of out a possible 30 points. Anything below is considered minor depression and anything equal or above is considered clinically diagnosable depression. It is most convenient because it does not require any prior training and only takes about 15 minutes to complete. Although it is time efficient and has a high reliability score, the main concern is the translation of the questions (Baker & Oswalt, 2007). For example, the question, "Things have been getting on top of me," may translate into another language literally (De La Haye, W.G., 2006). The positive side of the survey is that it is capable of detecting symptoms earlier than other surveys of PND. According to W.G. De La Haye (2006), there is a period within the first two weeks postpartum that is more difficult to accurately detect depressive symptoms because of balancing hormones. But within this period, the EDPS is most sensitive in detecting women who are most at risk of developing PND, but the reliability overall is lower than other surveys of postnatal depression.

Beck Depression Inventory

The Beck Depression Inventory (BDI) is a 21 item self report survey used to measure manifestations of depression. A score above nine is indicative of depression, and warrants further diagnosis. Although it is widely used to screen for postnatal depressive symptoms, it is not constructed for that purpose and may not be sensitive enough for this particular form of depression. A study

performed by Baker and Oswalt (2007) showed that the survey did not detect postnatal depressive symptoms within 50% of the population. Some researchers have suggested that the inability to detect PND accurately is attributed to existing low level symptoms of depression within the participants. The sensitivity of the survey is lower than most other PND surveys and brings about the concern of misdiagnosis and the lack of treatment for those with symptoms of depression, who may not yet be clinically diagnosed as depressed (Baker & Oswalt, 2007).

Postpartum Depression Symptoms Scale

The PDSS is a 35 item self report survey which attempts to measure the severity of symptoms associated with PND. The first seven questions of the scale are filter questions to assess whether the rest of the survey needs to be administered. The remainder of the scale consists of a five-point Likert scale (strongly disagree (1) to strongly agree (5); Baker & Oswalt, 2007) with subscales directly associated with postnatal depression. The subscales include questions regarding sleeping and eating disturbances, anxiety and insecurity, emotional lability, mental confusion, loss of self, guilt and shame, and suicidal thoughts (Baker & Oswalt, 2007). The scores on the completed scale are divided into three cutoff ranges: e"68 shows normal adjustment, 69-79 indicates significant symptoms of PND, and d"79 indicates high probability of postnatal depression. Though this particular survey is longer and takes some training to administer, it is sensitive enough to pick up minor symptoms of PND which may be important enough to initiate treatment and prevent of the worsening of the symptoms of depression.

Difficulties with screening for postnatal depression

Although assessment tools are available for screening PND, a major problem with the rates of PND today can be attributed to, but not solely appointed to, underreporting. The lack of uniform screening for PND, leads to the under-diagnosis of many women with symptoms of PND. Further, research shows that minority women are much less likely to report symptoms of depression (Abrams & Curran, 2007). It has been suggested that by

presenting opportunities for screening to minority women and women with lower socioeconomic status, the rates of treatment would likely increase. However there are still barriers to screening and treatment within populations of lower income women. For example, women with low SES are less likely to have transportation to the hospital or the financial support needed to cover the costs. Along with any stressor, self efficacy is a major factor in the willingness to seek out and receive the proper medical help. Cultural beliefs about motherhood and the expression of depression and the interpretation of symptoms may also affect the willingness to seek treatment (Abrams & Curran, 2007). Because there are differences in the rate of screening across different populations of women, it is important to consider the risk factors for the development of PND to better address the role of screening within populations of higher PND risk.

Risk Factors for the Development of PND

There are many factors that contribute to the prevalence of PND. Factors include, but are not limited to, socio-demographic, socio-economic, psychiatric, biological and personal factors (Milgrom, J., et. al, 2008; Kim et. al, 2008). Perceived social support, the level of satisfaction with the father of the child, and beliefs about motherhood are all also likely to correlate positively with the severity of symptoms and the development of PND (Rubertsson, C., Wickberg, B., Gustavsson, P., & Rådestad, I., 2005; Kara et. al, 2008).

Demographic factors

Most research on postnatal depression has focused on samples of middle class white women; however, studies show that demographic factors such as race, age and education are important risk factors for new mothers' health (Shanok & Miller, 2007). According to Shanok and Miller (2007), 26-44% of pregnant and newly parenting teenagers show signs of depression, with the highest percentage of postnatal depression within samples of poverty stricken inner city youths. Because of the poor financial conditions, lack of education within physicians and school systems, and social isolation, teenage mothers are at a much higher risk of experiencing depressive symptoms than any other

population (Abrams & Curran, 2007; Reid & Oliver, 2007). Though research indicates age as a risk factor independent of SES, socioeconomic status has been shown to correlate with the rates of PND in adolescent mothers (Cantilino, A., Barbosa, E.M., & Petribú, K., 2007). Many factors contribute to the PND prevalence among adolescents; however, one much larger factor is social isolation among teenagers. Limiting the amount of social support a teenage mother receives before and after pregnancy raises the risk of increasing the severity of depressive symptoms. Cultural factors and financial barriers place adolescent, single, low income and mothers who are minorities at higher risk of suffering from PND (Edge, D., 2007; Reid & Oliver, 2007).

Research shows that the differences of occurrence rates found between non-white and white mothers within the United States can be attributed to the differences in life style due to socioeconomic status (Abrams & Curran, 2007). Diaz, Le, Cooper, and Munoz (2007) studied as a sample of immigrant and non-immigrant Latina women as an at-risk group for the development of PND. They found that women who were considered to be immigrants, especially Latina women who do not speak English, were more likely to suffer from PND than women who were U.S. citizens (Diaz, Le, Cooper, & Muñoz, 2007). Further, data show that minority mothers are more likely to suffer from PND because of the multitude of social risks associated with minority women, such as lack of proper health care and financial stability (Edge, D., 2007). For example, minority and teenage mothers are less likely to obtain a high level of education (Reid & Oliver, 2007), thus limiting their job and income potential and increasing risk for financial instability. At particular risk are teenage mothers. Teenage mothers are more likely to drop out of high school thus limiting their opportunity of obtaining a higher education and a higher earning potential (Reid & Oliver, 2007).

Further evidence supports the role of income and education as risk factors in the development of PND (e.g., Reid & Oliver, 2007; Verkerk, G.J., et. al., 2005). Tannous L., Gigante, L.P., Fuchs, S.C., & Busnello, E.D., (2008) found rates of PND among

Brazilian first-time mothers ranged from 5-60%; which coincides with the variance of PND rates found among underdeveloped countries. The prevalence rates of PND for the U.S. and other industrial countries range from 13-15%, but, the rates of PND indicate that women with higher income are less likely to suffer from PND (Verkerk, G.J., et al., 2005). Further, women with full-time jobs are less likely to suffer from PND as opposed to those with just part time jobs (Reid & Oliver, 2007).

Beyond age, income and education, marital status has been found to contribute to risk of PND development. For example, J. Mandara and F. Varner, (2009) found that African American women who were married were less likely to suffer from psychological illnesses. Seeing as the SES of the family greatly affected the relationship of the parents, and the marital status of the mothers was related to the vulnerability to PND, socio-economic difference between married and non-married women may be found as a root risk to the symptoms of PND (Mandara, J. & Varner, F., 2009). As there have been growing numbers of single, low-income minority mothers over the last 20-30 years, the risk of PND in low income, single mothers is likely to be quite high, and often under diagnosed.

Because of the barriers that prevent minority women and adolescent mothers from receiving treatment, many cases go unreported, untreated and undetected. The under diagnosis and treatment of PND may lead to problems for the entire family involved. Teenage parents are more likely to drop out of school due to pregnancy, and as data suggest, low education and low SES is related to PND risk with higher levels of depression rates. With the size of the population at risk in mind, as well as the well being of the children, there is a drastic need for information concerning the occurrence and treatment of postnatal depression.

Psychiatric History

Mothers with a prior history of depression are much more likely to suffer from PND (Rubertsson, C., Wickberg, B., Gustavsson, P. & Radestad, I., 2005). History of mental illness is not the only psychological risk factor associated with PND. Though the research on the topic is slim,

personality factors have been studied as to identify a particular personality which is more likely to suffer from PND (Verkerk et. al., 2005). Verkerk et al., (2005) measured the vulnerability of experiencing depressive symptoms among mothers with introverted and neurotic traits. An introverted personality is characteristic of high tension, emotional liability, and insecurity. Introversion is identified as inhibited and shy. The outcome indicates that each trait was highly correlated with symptoms of depression. The results from the study show that a mother with high neuroticism and low introversion were more likely to suffer from symptoms of postnatal depression compared to those with low neuroticism and high introversion. Further, studies show that mothers who have experienced stressful life events, before or after pregnancy, are more likely to suffer from postnatal depression (Abrams & Curran, 2007). A divorce, the loss of a job, a family death or a major life transition within months of birth are all examples of life events that are influential on the likelihood of developing PND symptoms (Abrams & Curran, 2007). The studies may indicate that if prior psychiatric history, personality and current stress levels, that if screened properly, may lead to early detection and treatment of PND.

Social support

In addition to characteristics of the mother, characteristics of a mother's social environment may be predictive of the development of postnatal depression. In general, social support has been correlated with the stability of the relationship between biological parents, as well as the relationship between the mother and child (as reviewed by Abrams & Curran, 2007). Lower rates of maternal alcohol abuse, higher rates of medical care for the mother and child, as well as lower rates of child abuse are all directly associated with the perceived support from the mothers' social network (Abrams & Curran, 2007). Surkan, Peterson, Hughes & Gottlieb (2006) found that the number of members of your support network (i.e., having two or more friends or family members available) was associated with a 13.6 point lower mean score on the Center of Epidemiological Studies Depression Scale (CES-D). By studying the effect of perceived

social support, Surkan, Peterson, Hughes and Gottlieb (2006) found that women who scored high for PND risk, yet had a more obtainable support network, exhibited a more rapid decline in depressive symptoms as compared to women who were at high risk for PND with low social support. Additionally, social support, if perceived positively, has been shown to buffer symptoms of PND (Abrams & Curran, 2007). Although social support alone cannot prevent the occurrence of postnatal depression disorder completely (Reid & Oliver, 2007), social support from friends, family and significant others can lessen the severity of PND symptoms.

Specific types of social support and perceived support from important people in the mother's life may be most influential in the relation between social support and symptoms of PND. For example, when the relationship with the partner or spouse is perceived as positive and supportive, support from the partner serves to minimize the effects of PND (Surkan, Peterson, Hughes & Gottlieb, 2006). Further, instrumental support (i.e., tangible help) has been shown to greatly diminish the effects of postnatal depression (Kara et. al., 2008). For example, tasks such as washing dishes or doing laundry are helpful to new mothers just home from the hospital. Taking care of the baby, while the mother rests, is also supportive in that it will give the mother time alone. Help with these types of tangible tasks affords new mothers more time for activities not related to the baby. By lifting the burdens of motherhood, the partner will be perceived as a positive element and their help will have a greater influence over escalating or diminishing symptoms of PND. Although instrumental support for new mothers appears to decline across time, it is consistent across relationships (Smith, L. & Howard, K., 2008) and appears to be most beneficial for new mother's emotional and psychological health.

In contrast to the importance of instrumental, research investigating the role of emotional support on maternal psychological health has shown that emotional support from the biological father appears to be effective if the father is romantically involved with the mother of the child, but not in other

circumstances (Kara et. al., 2008). For example, previous studies found a negative correlation between emotional support and maternal depression (Surkan, Peterson, Hughes & Gottlieb, 2006), but these studies only focused on emotional support at one point and time. Therefore, it is difficult to predict whether women who were depressed perceived the lower levels of emotional support or whether the lower levels of emotional support were related to the progression of symptoms of PND. Therefore, expanding on such research, L. Smith and K. Howard (2008) measured the effects between emotional support and maternal depression across a two year period after childbirth. L. Smith and K. Howard (2008) predicted that mother's with higher levels of depression would be less open to emotional support and possibly discourage the fathers' motivation to give more support. The study's reports confirm the hypothesis stating that the level of the father's emotional support was inversely related to the mother's depressive symptoms. In other words, the higher the level of accepted support from the father the lower the severity of depressive symptoms for the mother. On the other hand, if the mother's symptoms have become severe enough to have negatively affected the familial relationships, the father is less likely to offer support in the first place.

The mothers' perception of the quality of the marital relationship is just as influential as the support itself (Dennis, C.L., Ross, L.E., Campbell, V.L., & Blackmore, E.R., 2006). Dennis, C.L., Ross, L.E., Campbell, V.L., & Blackmore, E.R. (2006) found that among over 2,000 Norwegian women and over 1,000 Chinese women, the satisfaction of the marriage was closely related to the duration and severity of depressive symptoms during the postpartum period. The results suggest that support from the partner may increase the positive perceptions of motherhood and relinquish the stress associated with it. As is apparent, the support received by the significant other is a topic in and of itself. More research is needed in order to derive new and more effective treatment.

Treatments for Postnatal Depression

Although PND rates may vary by race, income, and education, once diagnosed, the treatment options available can help to treat the symptoms of

postnatal depression as well as some underlying risk factors associated with psychopathology in general populations of women. Both pharmacological and psychological treatments are common for the treatment of Major Depressive Disorder, however, data suggests that mothers prefer psychological treatment over use of anti-depressant drugs for the treatment of PND because of the fear of complications and risks during breast-feeding (Cuijpers, P., Brännmark, J. & van Straten A., 2008). P. Cuijpers J. Brännmark and van Straten A. (2008) assessed the use of psychopharmacological drugs and psychological therapy to assess differences in rates of symptom reduction. They found no significant correlation between the use of medication to treat PND and the lowering of scores among the clients. These data lend additional support to the idea that PND and MDD are separate disorders, and thus identifies that the role of treatment of PND must be clearly researched outside of MDD.

As different types of psychological therapies may be better suited for the treatment of differing risk factors for the development and progression of postnatal depress, a few therapies have been highlighted for the utility in different populations of individuals. Specifically, interpersonal psychotherapy and multiple component therapy will be reviewed in light of their assistance in the treatment of specific symptoms common to PND.

Interpersonal psychotherapy

Interpersonal psychotherapy is used to address significant problem areas of interpersonal relationships, interpersonal disputes, interpersonal grief or deficits and current interpersonal relationships (Shanok & Miller, 2007). The 2007 study conducted by Shanok and Miller assessed the use of interpersonal therapy specifically for adolescent mothers. The therapy focused on the social, familial and financial transitions and the benefits of adolescent mothers making social ties with adults who were not parents. Further, the therapy also attempted to manage the perception of gains and losses of motherhood. Shanok and Miller (2007) found that inner city, teen mothers showed lower depressive symptoms after therapy.

Therefore, interpersonal therapy appears to be

effective in lowering depressive symptoms in the at risk group of adolescent mothers. The focus on interpersonal relationships and the potential deficits within current relationships is likely to be beneficial for women who may have low levels of social support, or who perceive low support and satisfaction within partnered relationships. Although useful in identifying and addressing deficits in interpersonal communication, this type of therapy may not effectively treat women who are at the highest risk for PND; low-income women of minority groups.

Multiple Component Therapy

Multiple component therapy may be more productive than a single form of therapy alone, as this type of therapy focuses on the mixture of psycho-education, treatment adherence, support and pharmacotherapy. Rojas et al., (2007) focused on a low-income Latina sample to assess treatment of PND with multiple component therapy. Rojas et al. (2007) found that, of a group of symptomatic Latina women, about 90% of the mothers showed lower scores on the Edinburgh Postnatal Depression Scale within the first three months of treatment, and continued to have lower scores throughout the postpartum period. Though there are concerns about the external validity of a study focusing on a single population of women, it is important to find evidence to support treatment of women at higher risk of experiencing PND. Data suggests that depression among mothers with newborns can be eased with the right form of treatment regardless of risk factors.

Conclusions and Future Directions

Over 50% of women may suffer from symptoms of Postnatal Depression; many of whom will be undetected within our current set of guidelines for the screening and treatment of the disorder. The risks associated with the under-diagnosis of PND add to preexisting risk factors within populations of pregnant women and new mothers, and could possibly extend the duration and severity of postnatal depression symptoms (Verkerk et al., 2005). Many risk factors, including previous history of depression, personality factors, and demographic

factors, may increase the occurrence of PND (Abrams & Curran, 2007; Reid & Oliver, 2007; Dennis, C.L., 2004). Further, research shows that if untreated, PND can lead to child abuse and more severe psychological symptoms in women (Abrams & Curran, 2007). Screening tools (i.e., EPDS, PDSS and BDI) are available and reliable at detecting symptoms and expediting treatment (Baker & Oswalt, 2007; Shanok & Miller, 2007), but appear to be used inconsistently during postnatal appointments. Because of the rising rates of the PND, many social workers are pushing to incorporate proper screening tools in a timely and cost efficient way (Baker & Oswalt, 2007) within routine postnatal check-ups. These changes to standardize the assessment of PND would increase the knowledge of the disorder and possibly break down the barriers that prevent women of all at-risk populations to seek treatment. If diagnosed, it appears that effective treatments are available to aid in the prevention of PND. For example, improvement of social support and parent relationships can lead to a reduction in postnatal depression levels (Dennis, C.L., Ross, L.E., Campbell, V.L., & Blackmore, E.R., 2006; Abrams & Curran, 2007). Unfortunately, even increasing the frequency of screening during postnatal check-ups may not reach the most at risk population of new mothers.

Multiple limitations exist within research of Postnatal Depression. First, many of the scales currently used to measure PND are not developed specifically to identify symptoms associated with the postpartum period (Armstrong, S., & Small, R., 2007). The few questionnaires that have shown some reliability in detecting postnatal depression may be inaccurate if women under-report symptoms of the illness due to expectations of social norms of motherhood. Further, some of the biological or physical symptoms of PND are difficult to separate from characteristically 'normal' symptoms of early motherhood. Because American middle to upper-class women made up the majority of the samples studied in the research on PND, this group of individuals may not accurately reflect the severity or range of symptoms that may be present in a population who also suffers from social, cultural, and

economic risk factors. In recent studies more information on minority mothers and the different aspects of their specific risk factors to PND has been highlighted. However, it is likely that there is still a high-risk population of women who are not treated at all. It is important to fund and partake in the research on Postnatal Depression, especially in disparate populations because children of the mothers who are left untreated for PND are much more likely to suffer from developmental and cognitive problems. In order to ensure that children are being properly cared for and socialized, the mental health field should develop appropriate ways to screen and treat all mothers during the postpartum period to lessen the social and economic burden non-treatment may produce.

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